

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1600cxc

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 SEP 09 CA/CAPLUS records now contain indexing from 1907 to the
present
NEWS 4 AUG 05 New pricing for EUROPATFULL and PCTFULL effective
August 1, 2003
NEWS 5 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN
NEWS 6 AUG 18 Data available for download as a PDF in RDISCLOSURE
NEWS 7 AUG 18 Simultaneous left and right truncation added to PASCAL
NEWS 8 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Right
Truncation
NEWS 9 AUG 18 Simultaneous left and right truncation added to ANABSTR
NEWS 10 SEP 22 DIPPR file reloaded
NEWS 11 SEP 25 INPADOC: Legal Status data to be reloaded
NEWS 12 SEP 29 DISSABS now available on STN
NEWS 13 OCT 10 PCTFULL: Two new display fields added

NEWS EXPRESS OCTOBER 01 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

All use of STN is subject to the provisions of the STN Customer
agreement. Please note that this agreement limits use to scientific
research. Use for software development or design or implementation
of commercial gateways or other similar uses is prohibited and may
result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 14:08:10 ON 20 OCT 2003

=> file medline, agricola, caba, caplus, biosis, biotechno, uspatfull		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'MEDLINE' ENTERED AT 14:08:27 ON 20 OCT 2003

FILE 'AGRICOLA' ENTERED AT 14:08:27 ON 20 OCT 2003

FILE 'CABA' ENTERED AT 14:08:27 ON 20 OCT 2003

COPYRIGHT (C) 2003 CAB INTERNATIONAL (CABI)

FILE 'CAPLUS' ENTERED AT 14:08:27 ON 20 OCT 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'BIOSIS' ENTERED AT 14:08:27 ON 20 OCT 2003
COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'BIOTECHNO' ENTERED AT 14:08:27 ON 20 OCT 2003
COPYRIGHT (C) 2003 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'USPATFULL' ENTERED AT 14:08:27 ON 20 OCT 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

=> s (gaxiola, r? or gaxiola r?)/au
L1 75 (GAXIOLA, R? OR GAXIOLA R?)/AU

=> s (fink, g? or fink g?)/au
L2 3459 (FINK, G? OR FINK G?)/AU

=> s (alper, s? or alper s?)/au
L3 682 (ALPER, S? OR ALPER S?)/AU

=> s l1 and l2 and l3
L4 14 L1 AND L2 AND L3

=> duplicate remove l4
DUPLICATE PREFERENCE IS 'MEDLINE, AGRICOLA, CABA, CAPLUS, BIOSIS, BIOTECHNO,
USPATFULL'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L4
L5 4 DUPLICATE REMOVE L4 (10 DUPLICATES REMOVED)

=> d l5 1-4 ti

L5 ANSWER 1 OF 4 USPATFULL on STN
TI Proton transporters and uses in plants

L5 ANSWER 2 OF 4 MEDLINE on STN DUPLICATE 1
TI Drought- and salt-tolerant plants result from overexpression of the AVP1
H+-pump.

L5 ANSWER 3 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
TI Increased size, salt and drought tolerance in A. thaliana overexpressing
AVP1 vacuolar H+- pyrophosphatase.

L5 ANSWER 4 OF 4 MEDLINE on STN DUPLICATE 2
TI The Arabidopsis thaliana proton transporters, AtNhxl and Avp1, can
function in cation detoxification in yeast.

=> d l5 1-4 bib

L5 ANSWER 1 OF 4 USPATFULL on STN
AN 2002:315970 USPATFULL
TI Proton transporters and uses in plants
IN **Gaxiola, Roberto A.**, Mansfield Center, CT, UNITED STATES
Fink, Gerald R., Chestnut Hill, MA, UNITED STATES
Alper, Seth L., Boston, MA, UNITED STATES
PA Whitehead Institute for Biomedical Research, Cambridge, MA, UNITED
STATES, 02142 (U.S. corporation)
PI US 2002178464 A1 20021128
AI US 2001-834998 A1 20010413 (9)

RLI Continuation of Ser. No. US 2000-644039, filed on 22 Aug 2000, ABANDONED
PRAI US 1999-164808P 19991110 (60)
DT Utility
FS APPLICATION
LREP HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX
9133, CONCORD, MA, 01742-9133
CLMN Number of Claims: 76
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 1543
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 2 OF 4 MEDLINE on STN DUPLICATE 1
AN 2001542872 MEDLINE
DN 21457337 PubMed ID: 11572991
TI Drought- and salt-tolerant plants result from overexpression of the AVP1
H+-pump.
AU **Gaxiola R A**; Li J; Undurraga S; Dang L M; Allen G J; **Alper
S L**; **Fink G R**
CS Whitehead Institute for Biomedical Research, Massachusetts Institute of
Technology, 9 Cambridge Center, Cambridge, MA 02142-1479, USA..
roberto.gaxiola@uconn.edu
NC DK34854 (NIDDK)
DK43495 (NIDDK)
SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF
AMERICA, (2001 Sep 25) 98 (20) 11444-9.
Journal code: 7505876. ISSN: 0027-8424.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200112
ED Entered STN: 20011010
Last Updated on STN: 20020122
Entered Medline: 20011204

L5 ANSWER 3 OF 4 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
AN 2003:41123 BIOSIS
DN PREV200300041123
TI Increased size, salt and drought tolerance in A. thaliana overexpressing
AVP1 vacuolar H+- pyrophosphatase.
AU **Fink, Gerald R.** [Reprint Author]; **Alper, Seth L.**;
Gaxiola, Roberto A.; Li, Jisheng; Undurraga, Soledad
CS Whitehead Institute M.I.T., Cambridge, MA, USA
roberto.gaxiola@uconn.edu
SO Plant Biology (Rockville), (2001) Vol. 2001, pp. 85. print.
Meeting Info.: Joint Annual Meetings of the American Society of Plant
Biologists and the Canadian Society of Plant Physiologists. Providence,
Rhode Island, USA. July 21-25, 2001. American Society of Plant Biologists;
Canadian Society of Plant Physiologists.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 15 Jan 2003
Last Updated on STN: 15 Jan 2003

L5 ANSWER 4 OF 4 MEDLINE on STN DUPLICATE 2
AN 1999145575 MEDLINE
DN 99145575 PubMed ID: 9990049
TI The Arabidopsis thaliana proton transporters, AtNhx1 and Avp1, can
function in cation detoxification in yeast.
AU **Gaxiola R A**; Rao R; Sherman A; Grisafi P; **Alper S L**;
Fink G R
CS Whitehead Institute for Biomedical Research, Massachusetts Institute of
Technology, 9 Cambridge Center, Cambridge, MA 02142-1479, USA.

NC DK43495 (NIDDK)
DK54214 (NIDDK)
GM52414 (NIGMS)
+
SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF
AMERICA, (1999 Feb 16) 96 (4) 1480-5.
Journal code: 7505876. ISSN: 0027-8424.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
OS GENBANK-AF106324
EM 199903
ED Entered STN: 19990402
Last Updated on STN: 19990402
Entered Medline: 19990325

=> d his

(FILE 'HOME' ENTERED AT 14:08:10 ON 20 OCT 2003)

FILE 'MEDLINE, AGRICOLA, CABA, CAPLUS, BIOSIS, BIOTECHNO, USPATFULL'
ENTERED AT 14:08:27 ON 20 OCT 2003

L1 75 S (GAXIOLA, R? OR GAXIOLA R?)/AU
L2 3459 S (FINK, G? OR FINK G?)/AU
L3 682 S (ALPER, S? OR ALPER S?)/AU
L4 14 S L1 AND L2 AND L3
L5 4 DUPLICATE REMOVE L4 (10 DUPLICATES REMOVED)

=> s l1 or l2 or l3

L6 4165 L1 OR L2 OR L3

=> s l6 not l4

L7 4151 L6 NOT L4

=> s l7 and plant

L8 165 L7 AND PLANT

=> s vacuolar(w)pyrophosphatase

L9 95 VACUOLAR(W) PYROPHOSPHATASE

=> s antiporter

L10 10498 ANTIPORTER

=> s l9 or l10

L11 10584 L9 OR L10

=> s l8 and l11

L12 10 L8 AND L11

=> duplicate remove l12

DUPLICATE PREFERENCE IS 'MEDLINE, AGRICOLA, CABA, CAPLUS, BIOSIS, BIOTECHNO,
USPATFULL'

KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n

PROCESSING COMPLETED FOR L12

L13 5 DUPLICATE REMOVE L12 (5 DUPLICATES REMOVED)

=> d l13 1-5 ti

L13 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN

TI Enhanced meristematic activity and competence by overexpression of
tonoplast pyrophosphatase

L13 ANSWER 2 OF 5 USPATFULL on STN

TI Methods for imparting desirable phenotypic traits, including drought, freeze, and high salt tolerance and methods for increasing seed production

L13 ANSWER 3 OF 5 MEDLINE on STN

TI Genetic manipulation of vacuolar proton pumps and transporters.

L13 ANSWER 4 OF 5 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

TI Over-expression of the vacuolar H⁺-pump AVP1 positively affects growth and development in Arabidopsis.

L13 ANSWER 5 OF 5 MEDLINE on STN DUPLICATE 1

TI CAX1, an H⁺/Ca²⁺ **antiporter** from Arabidopsis.

=> d l13 1-5 bib

L13 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:157478 CAPLUS

DN 136:197193

TI Enhanced meristematic activity and competence by overexpression of tonoplast pyrophosphatase

IN **Gaxiola, Roberto A.**

PA University of Connecticut, USA; Whitehead Institute

SO PCT Int. Appl., 76 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002015674	A1	20020228	WO 2001-US9548	20010324
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
WO 2001033945	A1	20010517	WO 2000-US30955	20001110
WO 2001033945	C1	20020725		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001050974	A5	20020304	AU 2001-50974	20010324
EP 1315410	A1	20030604	EP 2001-924311	20010324
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2002023282	A1	20020221	US 2001-934088	20010820
WO 2002016558	A1	20020228	WO 2001-US41806	20010820
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,				

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU	2001085459	A5	20020304	AU	2001-85459	20010820
EP	1315795	A1	20030604	EP	2001-964622	20010820

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRAI	US	2000-226223P	P	20000818
	US	2000-644039	A2	20000822
	WO	2000-US30955	W	20001110
	US	1999-164808P	P	19991110
	WO	2001-US9548	W	20010324
	WO	2001-US41806	W	20010820

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 5 USPATFULL on STN
 AN 2002:38560 USPATFULL
 TI Methods for imparting desirable phenotypic traits, including drought,
 freeze, and high salt tolerance and methods for increasing seed
 production
 IN **Gaxiola, Roberto A.**, Mansfield Center, CT, UNITED STATES
 PI US 2002023282 A1 20020221
 AI US 2001-934088 A1 20010820 (9)
 PRAI US 2000-226223P 20000818 (60)
 DT Utility
 FS APPLICATION
 LREP Cummings & Lockwood, Granite Square, 700 State Street, P.O. Box 1960,
 New Haven, CT, 06509-1960
 CLMN Number of Claims: 32
 ECL Exemplary Claim: 1
 DRWN 14 Drawing Page(s)
 LN.CNT 1030
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 3 OF 5 MEDLINE on STN
 AN 2002370399 MEDLINE
 DN 22111121 PubMed ID: 12114553
 TI Genetic manipulation of vacuolar proton pumps and transporters.
 AU **Gaxiola Roberto A; Fink Gerald R;** Hirschi Kendal D
 CS College of Agriculture and Natural Resources, Department of Plant Science,
 University of Connecticut, Storrs 06269, USA.. roberto.gaxiola@uconn.edu
 NC 1R01 GM57427 (NIGMS)
 SO PLANT PHYSIOLOGY, (2002 Jul) 129 (3) 967-73. Ref: 42
 Journal code: 0401224. ISSN: 0032-0889.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 General Review; (REVIEW)
 (REVIEW, TUTORIAL)
 LA English
 FS Priority Journals
 EM 200210
 ED Entered STN: 20020713
 Last Updated on STN: 20021029
 Entered Medline: 20021028

L13 ANSWER 4 OF 5 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN
 AN 2002:610112 BIOSIS
 DN PREV200200610112
 TI Over-expression of the vacuolar H⁺-pump AVP1 positively affects growth and
 development in Arabidopsis.
 AU Li, Jisheng [Reprint author]; **Gaxiola, Roberto A.** [Reprint
 author]
 CS Department of Plant Science, University of Connecticut, Storrs, CT, USA
 jisheng.li@uconn.edu
 SO Plant Biology (Rockville), (2002) Vol. 2002, pp. 95-96. print.

Meeting Info.: Annual Meeting of the American Society of Plant Biologists on Plant Biology. Denver, CO, USA. August 03-07, 2002. American Society of Plant Biologists.

DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LA English

ED Entered STN: 27 Nov 2002
Last Updated on STN: 27 Nov 2002

L13 ANSWER 5 OF 5 MEDLINE on STN DUPLICATE 1
AN 96323302 MEDLINE
DN 96323302 PubMed ID: 8710949
TI CAX1, an H⁺/Ca²⁺ **antiporter** from Arabidopsis.
AU Hirschi K D; Zhen R G; Cunningham K W; Rea P A; Fink G R
CS Whitehead Institute for Biomedical Research, Nine Cambridge Center, MA 02142, USA.
SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1996 Aug 6) 93 (16) 8782-6.
Journal code: 7505876. ISSN: 0027-8424.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
OS GENBANK-D15647; GENBANK-P31801; GENBANK-U36603; GENBANK-U57411; GENBANK-U57412
EM 199609
ED Entered STN: 19960919
Last Updated on STN: 19960919
Entered Medline: 19960912

=> d his

(FILE 'HOME' ENTERED AT 14:08:10 ON 20 OCT 2003)

FILE 'MEDLINE, AGRICOLA, CABA, CAPLUS, BIOSIS, BIOTECHNO, USPATFULL'
ENTERED AT 14:08:27 ON 20 OCT 2003

L1 75 S (GAXIOLA, R? OR GAXIOLA R?)/AU
L2 3459 S (FINK, G? OR FINK G?)/AU
L3 682 S (ALPER, S? OR ALPER S?)/AU
L4 14 S L1 AND L2 AND L3
L5 4 DUPLICATE REMOVE L4 (10 DUPLICATES REMOVED)
L6 4165 S L1 OR L2 OR L3
L7 4151 S L6 NOT L4
L8 165 S L7 AND PLANT
L9 95 S VACUOLAR (W) PYROPHOSPHATASE
L10 10498 S ANTIporter
L11 10584 S L9 OR L10
L12 10 S L8 AND L11
L13 5 DUPLICATE REMOVE L12 (5 DUPLICATES REMOVED)

=> s l11 not l6

L14 10549 L11 NOT L6

=> s l14 and plant

L15 540 L14 AND PLANT

=> s (plant(s)transform?) or (plant(s)transgenic) or (plant(s)recombinant) or (plant(s)(genetically(w)modified))

L16 65977 (PLANT(S) TRANSFORM?) OR (PLANT(S) TRANSGENIC) OR (PLANT(S) RECOMBINANT) OR (PLANT(S) (GENETICALLY (W) MODIFIED))

=> s l15 and l16

L17 71 L15 AND L16

=> duplicate remove l17

DUPLICATE PREFERENCE IS 'AGRICOLA, CABA, CAPLUS, BIOTECHNO, USPATFULL'

KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n

PROCESSING COMPLETED FOR L17

L18 64 DUPLICATE REMOVE L17 (7 DUPLICATES REMOVED)

=> d l18 1-10 ti

L18 ANSWER 1 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN

TI Na⁺/H⁺ **antiporter** with novel ion specificity from halotolerant cyanobacterium *Aphanothece halophytica*, gene, and use in improving salt tolerance of transgenic organisms

L18 ANSWER 2 OF 64 USPATFULL on STN

TI Genetic marker for spondyloepimetaphyseal dysplasia

L18 ANSWER 3 OF 64 USPATFULL on STN

TI Minicell compositions and methods

L18 ANSWER 4 OF 64 USPATFULL on STN

TI Minicell-based transformation

L18 ANSWER 5 OF 64 USPATFULL on STN

TI Minicell-producing parent cells

L18 ANSWER 6 OF 64 USPATFULL on STN

TI Minicell-based rational drug design

L18 ANSWER 7 OF 64 USPATFULL on STN

TI Target display on minicells

L18 ANSWER 8 OF 64 USPATFULL on STN

TI Modified tetracycline repressor protein compositions and methods of use

L18 ANSWER 9 OF 64 USPATFULL on STN

TI Transporters and ion channels

L18 ANSWER 10 OF 64 USPATFULL on STN

TI Minicell-based transfection

=> d l18 1 bib

L18 ANSWER 1 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:502372 CAPLUS

DN 139:80253

TI Na⁺/H⁺ **antiporter** with novel ion specificity from halotolerant cyanobacterium *Aphanothece halophytica*, gene, and use in improving salt tolerance of transgenic organisms

IN Takabe, Akihiro; Hibino, Takashi; Tanaka, Yoshito; Takabe, Tetsuko; Nakamura, Tatsunosuke

PA Japan Science and Technology Corporation, Japan

SO Jpn. Kokai Tokkyo Koho, 26 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 2003180373	A2	20030702	JP 2001-390491	20011221
PRAI	JP 2001-390491		20011221		

=> d l18 11-20 ti

L18 ANSWER 11 OF 64 USPATFULL on STN
 TI Minicells comprising membrane proteins

L18 ANSWER 12 OF 64 USPATFULL on STN
 TI Methods and compositions for diagnosing and treating rheumatoid arthritis

L18 ANSWER 13 OF 64 USPATFULL on STN
 TI Novel defense induced multi-drug resistance genes and uses thereof

L18 ANSWER 14 OF 64 USPATFULL on STN
 TI Libraries of expressible gene sequences

L18 ANSWER 15 OF 64 USPATFULL on STN
 TI E. coli virulence determinants and methods of use thereof

L18 ANSWER 16 OF 64 USPATFULL on STN
 TI Libraries of expressible gene sequences

L18 ANSWER 17 OF 64 USPATFULL on STN
 TI Nucleic acids, proteins, and antibodies

L18 ANSWER 18 OF 64 USPATFULL on STN
 TI Increasing salt tolerance in plants by overexpression of vacuolar cation-proton antiporters

L18 ANSWER 19 OF 64 USPATFULL on STN
 TI Nucleic acids encoding 3-ketoacyl-ACP reductase from Moraxella catarrhalis

L18 ANSWER 20 OF 64 USPATFULL on STN
 TI Nucleic acid and amino acid sequences relating to Enterococcus faecalis for diagnostics and therapeutics

=> d 118 18 bib

L18 ANSWER 18 OF 64 USPATFULL on STN
 AN 2003:66605 USPATFULL
 TI Increasing salt tolerance in plants by overexpression of vacuolar cation-proton antiporters
 IN Blumwald, Eduardo, Davis, CA, UNITED STATES
 Apse, Maris, Davis, CA, UNITED STATES
 PI US 2003046729 A1 20030306
 AI US 2002-155535 A1 20020524 (10)
 RLI Continuation-in-part of Ser. No. US 1999-271584, filed on 18 Mar 1999, PENDING
 PRAI US 1998-78474P 19980318 (60)
 US 1999-116111P 19990115 (60)
 DT Utility
 FS APPLICATION
 LREP Michael R. Ward, Morrison & Foerster LLP, 425 Market Street, San Francisco, CA, 94105-2842
 CLMN Number of Claims: 13
 ECL Exemplary Claim: 1
 DRWN 7 Drawing Page(s)
 LN.CNT 2482
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 118 21-30 ti

L18 ANSWER 21 OF 64 USPATFULL on STN
 TI **Plant** glucose-6-phosphate translocator

L18 ANSWER 22 OF 64 USPATFULL on STN
 TI Nucleic acid sequences and expression system relating to Enterococcus faecium for diagnostics and therapeutics

L18 ANSWER 23 OF 64 USPATFULL on STN
 TI Nucleic acid and amino acid sequences relating to Acinetobacter baumannii for diagnostics and therapeutics

L18 ANSWER 24 OF 64 USPATFULL on STN
 TI Nucleic acid and amino acid sequences relating to pseudomonas aeruginosa for diagnostics and therapeutics

L18 ANSWER 25 OF 64 USPATFULL on STN
 TI Polynucleotides, materials incorporating them, and methods for using them

L18 ANSWER 26 OF 64 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
 TI Functional genomics of phosphate antiport systems of plastids

L18 ANSWER 27 OF 64 CABA COPYRIGHT 2003 CABI on STN DUPLICATE 1
 TI Overexpression of a plasma membrane Na⁺/H⁺ **antiporter** gene improves salt tolerance in Arabidopsis thaliana.

L18 ANSWER 28 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 2
 TI Protein and DNA sequences of sos1 gene encoding putative Na⁺/H⁺ **antiporter** isolated from Arabidopsis thaliana related to salt tolerance in plants

L18 ANSWER 29 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Sequence homologs of Na⁺/H⁺ antiporters of Physcomitrella patens and their use in improving **plant** resistance to salt stress

L18 ANSWER 30 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
 TI Full-length cDNA of Na⁺/H⁺ **antiporter** of Suaeda salsa (SsNHX1) and use thereof to improve salt resistance in transgenic plants

=> d l18 27,28,29,30 bib

L18 ANSWER 27 OF 64 CABA COPYRIGHT 2003 CABI on STN DUPLICATE 1
 AN 2003:41062 CABA
 DN 20033007138
 TI Overexpression of a plasma membrane Na⁺/H⁺ **antiporter** gene improves salt tolerance in Arabidopsis thaliana
 AU Shi, H. Z.; Lee, B. H.; Wu, S. J.; Zhu, J. K.
 CS Department of Plant Sciences, University of Arizona, Tucson, AZ 85721, USA.
 SO Nature Biotechnology, (2003) Vol. 21, No. 1, pp. 81-85. 44 ref.
 Publisher: Nature America, Inc. New York
 ISSN: 1087-0156
 CY United States
 DT Journal
 LA English

L18 ANSWER 28 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 2
 AN 2002:488282 CAPLUS
 DN 137:58609
 TI Protein and DNA sequences of sos1 gene encoding putative Na⁺/H⁺ **antiporter** isolated from Arabidopsis thaliana related to salt tolerance in plants
 IN Zhu, Jian-kang; Shi, Huazhong; Ishitani, Manabu; Stevenson, Becky
 PA The Arizona Board of Regents, USA
 SO U.S. Pat. Appl. Publ., 21 pp.
 CODEN: USXXCO
 DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002083485	A1	20020627	US 2001-824734	20010404
PRAI	US 2000-194648P	P	20000404		

L18 ANSWER 29 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:157828 CAPLUS

DN 136:213804

TI Sequence homologs of Na⁺/H⁺ antiporters of *Physcomitrella patens* and their use in improving **plant** resistance to salt stress

IN Da Costa e Silva, Oswaldo; Ishitani, Manabu

PA Basf Plant Science G.m.b.H., Germany

SO PCT Int. Appl., 203 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002016423	A2	20020228	WO 2001-US26550	20010824
	WO 2002016423	A3	20030626		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU	2001088404	A5	20020304	AU 2001-88404	20010824
EP	1339849	A2	20030903	EP 2001-968130	20010824
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI	US 2000-227974P	P	20000825		
	WO 2001-US26550	W	20010824		

L18 ANSWER 30 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:398913 CAPLUS

DN 138:363880

TI Full-length cDNA of Na⁺/H⁺ **antiporter** of *Suaeda salsa* (SsNHX1) and use thereof to improve salt resistance in transgenic plants

IN Zhao, Yanxiu; Ma, Xiuling; Sun, Yufei; Zhang, Hui

PA Shandong Normal Univ., Peop. Rep. China

SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 16 pp.

CODEN: CNXXEV

DT Patent

LA Chinese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1357626	A	20020710	CN 2001-123563	20010802
PRAI	CN 2001-123563		20010802		

=> d 118 31-40 ti

L18 ANSWER 31 OF 64 USPATFULL on STN

TI Novel Polynucleotides

L18 ANSWER 32 OF 64 USPATFULL on STN

TI Stress-regulated genes of plants, transgenic plants containing same, and methods of use

L18 ANSWER 33 OF 64 USPATFULL on STN
 TI Nucleic acids, proteins, and antibodies

L18 ANSWER 34 OF 64 USPATFULL on STN
 TI Transgenic plants with increased calcium stores

L18 ANSWER 35 OF 64 USPATFULL on STN
 TI Sodium/proton **antiporter** gene

L18 ANSWER 36 OF 64 USPATFULL on STN
 TI Nucleic acids, proteins and antibodies

L18 ANSWER 37 OF 64 USPATFULL on STN
 TI Transgenic plants incorporating traits of *zostera marina*

L18 ANSWER 38 OF 64 USPATFULL on STN
 TI Liquidambar styraciflua AGAMOUS (LSAG) gene

L18 ANSWER 39 OF 64 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
 TI Salinity-induced glutathione synthesis in *Brassica napus*

L18 ANSWER 40 OF 64 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
 TI A heat treatment induced the expression of a Na.sup.+/H.sup.+ antiport gene (cNHX1) in citrus fruit

=> d 118 32,35,40 bib

L18 ANSWER 32 OF 64 USPATFULL on STN
 AN 2002:287515 USPATFULL
 TI Stress-regulated genes of plants, transgenic plants containing same, and methods of use
 IN Harper, Jeffrey F., Del Mar, CA, UNITED STATES
 Kreps, Joel, Carlsbad, CA, UNITED STATES
 Wang, Xun, San Diego, CA, UNITED STATES
 Zhu, Tong, San Diego, CA, UNITED STATES
 PI US 2002160378 A1 20021031
 AI US 2001-938842 A1 20010824 (9)
 PRAI US 2000-227866P 20000824 (60)
 US 2001-264647P 20010126 (60)
 US 2001-300111P 20010622 (60)
 DT Utility
 FS APPLICATION
 LREP Lisa A. Haile, J.D., Ph.D., GRAY CARY WARE & FREIDENRICH LLP, Suite 1600, 4365 Executive Drive, San Diego, CA, 92121-2189
 CLMN Number of Claims: 79
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 10399
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 35 OF 64 USPATFULL on STN
 AN 2002:158873 USPATFULL
 TI Sodium/proton **antiporter** gene
 IN Fukuda, Atsunori, Ibaraki, JAPAN
 Tanaka, Yoshiyuki, Ibaraki, JAPAN
 PI US 2002083487 A1 20020627
 AI US 2001-888035 A1 20010622 (9)
 RLI Continuation-in-part of Ser. No. WO 1999-JP7224, filed on 22 Dec 1999, UNKNOWN
 PRAI JP 1998-365604 19981222
 DT Utility
 FS APPLICATION
 LREP David R. Saliwanchik, Saliwanchik, Lloyd & Saliwanchik, Suite A-1, 2421

N.W. 41st Street, Gainesville, FL, 32606-6669
CLMN Number of Claims: 28
ECL Exemplary Claim: 1
DRWN 6 Drawing Page(s)
LN.CNT 1066
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 40 OF 64 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
AN 2002:34693241 BIOTECHNO
TI A heat treatment induced the expression of a Na.sup.+/H.sup.+ antiport
gene (cNHX1) in citrus fruit
AU Porat R.; Pavoncello D.; Ben-Hayyim G.; Lurie S.
CS R. Porat, Dept. Postharvest Sci. Fresh Produce, Agricultural Res.
Organization (ARO), Volcani Center, P. O. Box 6, Bet Dagan 50250, Israel.
E-mail: rporat@volcani.agri.gov.il
SO Plant Science, (2002), 162/6 (957-963), 21 reference(s)
CODEN: PLSCE4 ISSN: 0168-9452
PUI S0168945202000419
DT Journal; Article
CY Ireland
LA English
SL English

=> d l18 41-50 ti

L18 ANSWER 41 OF 64 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
TI Regulation of expression of the vacuolar Na.sup.+/H.sup.+
antiporter gene AtNHX1 by salt stress and abscisic acid

L18 ANSWER 42 OF 64 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
TI The putative plasma membrane NA.sup.+/H.sup.+ **antiporter** SOS1
controls long-distance NA.sup.+ transport in plants

L18 ANSWER 43 OF 64 CABA COPYRIGHT 2003 CABI on STN DUPLICATE 3
TI Introduction of a Na+/H+ **antiporter** gene from Atriplex gmelini
confers salt tolerance to rice.

L18 ANSWER 44 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
TI Stress-resistant oversized transgenic plants capable of growing in
salinized soil

L18 ANSWER 45 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
TI **Plant** Na+/H+ **antiporter** genes regulating vacuolar pH
and use in flower color regulation

L18 ANSWER 46 OF 64 USPATFULL on STN
TI Methods and compositions for the introduction of molecules into cells

L18 ANSWER 47 OF 64 USPATFULL on STN
TI Methods for generating and screening novel metabolic pathways

L18 ANSWER 48 OF 64 CABA COPYRIGHT 2003 CABI on STN DUPLICATE 4
TI A transcriptional regulator of a pristinamycin resistance gene in
Streptomyces coelicolor.

L18 ANSWER 49 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
TI Atriplex gmelini Na+/H+ **antiporter**, encoding cDNA, and
transgenic plants with improved salt tolerance

L18 ANSWER 50 OF 64 USPATFULL on STN
TI Unique nucleotide and amino acid sequence and uses thereof

=> d l18 41,42,43,44,45,49 bib

L18 ANSWER 41 OF 64 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
 AN 2002:35141023 BIOTECHNO
 TI Regulation of expression of the vacuolar Na.sup.+/H.sup.+
antiporter gene AtNHX1 by salt stress and abscisic acid
 AU Shi H.; Zhu J.-K.
 CS J.-K. Zhu, Department of Plant Sciences, University of Arizona, Tucson,
 AZ 85721, United States.
 E-mail: jkzhu@ag.arizona.edu
 SO Plant Molecular Biology, (2002), 50/3 (543-550), 33 reference(s)
 CODEN: PMBIDB ISSN: 0167-4412
 DT Journal; Article
 CY Netherlands
 LA English
 SL English

L18 ANSWER 42 OF 64 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
 AN 2002:34271299 BIOTECHNO
 TI The putative plasma membrane NA.sup.+/H.sup.+ **antiporter** SOS1
 controls long-distance NA.sup.+ transport in plants
 AU Shi H.; Quintero F.J.; Pardo J.M.; Zhu J.-K.
 CS J.-K. Zhu, Department of Plant Sciences, University of Arizona, Tucson,
 AZ 85721, United States.
 E-mail: jkzhu@ag.arizona.edu
 SO Plant Cell, (2002), 14/2 (465-477), 39 reference(s)
 CODEN: PLCEEW ISSN: 1040-4651
 DT Journal; Article
 CY United States
 LA English
 SL English

L18 ANSWER 43 OF 64 CABA COPYRIGHT 2003 CABI on STN DUPLICATE 3
 AN 2003:31195 CABA
 DN 20033002324
 TI Introduction of a Na⁺/H⁺ **antiporter** gene from Atriplex gmelini
 confers salt tolerance to rice
 AU Ohta, M.; Hayashi, Y.; Nakashima, A.; Hamada, A.; Tanaka, A.; Nakamura,
 T.; Hayakawa, T.
 CS Plantech Research Institute, 1000 Kamoshida-cho, Aoba-ku, Yokohama,
 Kanagawa 227-0033, Japan.
 SO FEBS Letters, (2002) Vol. 532, No. 3, pp. 279-282. 29 ref.
 Publisher: Elsevier Science B.V. Amsterdam
 ISSN: 0014-5793
 CY Netherlands Antilles
 DT Journal
 LA English

L18 ANSWER 44 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 2001:359727 CAPLUS
 DN 134:364258
 TI Stress-resistant oversized transgenic plants capable of growing in
 salinized soil
 IN Gaiola, Roberto A.
 PA University of Connecticut, USA; Whitehead Institute
 SO PCT Int. Appl., 68 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001033945	A1	20010517	WO 2000-US30955	20001110
	WO 2001033945	C1	20020725		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,

HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
 LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
 YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 BR 2000015636 A 20020709 BR 2000-15636 20001110
 EP 1231831 A1 20020821 EP 2000-980337 20001110
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 JP 2003516727 T2 20030520 JP 2001-535966 20001110
 WO 2002015674 A1 20020228 WO 2001-US9548 20010324
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
 HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
 LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
 YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 AU 2001050974 A5 20020304 AU 2001-50974 20010324
 EP 1315410 A1 20030604 EP 2001-924311 20010324
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 US 2002178464 A1 20021128 US 2001-834998 20010413
 US 2002023282 A1 20020221 US 2001-934088 20010820
 WO 2002016558 A1 20020228 WO 2001-US41806 20010820
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
 RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
 UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 AU 2001085459 A5 20020304 AU 2001-85459 20010820
 EP 1315795 A1 20030604 EP 2001-964622 20010820
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 PRAI US 1999-164808P P 19991110
 US 2000-226223P P 20000818
 US 2000-644039 A 20000822
 WO 2000-US30955 W 20001110
 WO 2001-US9548 W 20010324
 WO 2001-US41806 W 20010820

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 45 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 2001:152845 CAPLUS
 DN 134:203460
 TI **Plant Na⁺/H⁺ antiporter** genes regulating vacuolar pH
 and use in flower color regulation
 IN Iida, Shigeru; Tanaka, Sachiko; Inagaki, Yoshishige
 PA Suntory Limited, Japan
 SO PCT Int. Appl., 68 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	----	-----	-----

PI WO 2001014560 A1 20010301 WO 2000-JP5722 20000824
W: AU, CA, JP, NZ, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE
EP 1123977 A1 20010816 EP 2000-955003 20000824
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI
PRAI JP 1999-236800 A 19990824
WO 2000-JP5722 W 20000824
RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 49 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:388657 CAPLUS
DN 133:39095
TI Atriplex gmelini Na⁺/H⁺ **antiporter**, encoding cDNA, and
transgenic plants with improved salt tolerance
IN Shono, Mariko; Hayakawa, Takahiko; Tanaka, Akira
PA Plant Engineering K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 2000157287	A2	20000613	JP 1999-261606	19990916
PRAI	JP 1998-269504	A	19980924		

=> d 118 51-60 ti

L18 ANSWER 51 OF 64 AGRICOLA Compiled and distributed by the National
Agricultural Library of the Department of Agriculture of the United States
of America. It contains copyrighted materials. All rights reserved.
(2003) on STN DUPLICATE 5
TI Purification, properties, and molecular cloning of a novel Ca²⁺ -binding
protein in radish vacuoles.

L18 ANSWER 52 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
TI Salt tolerance of a freshwater cyanobacterium *Synechococcus* sp. PCC 7943
transformed with Na⁺/H⁺ **antiporter** from *Vibrio alginolyticus*

L18 ANSWER 53 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
TI Cloning and expression of **plant** genes for glucose-6-
phosphate/phosphate-translocator and their use in altering starch and
protein accumulation

L18 ANSWER 54 OF 64 USPATFULL on STN
TI Method for predicting the tendency of a protein to form amphiphilic
.alpha..beta. structure

L18 ANSWER 55 OF 64 USPATFULL on STN
TI Method for producing DNA encoding cystic fibrosis transmembrane
conductance regulator (CFTR) protein in *E. coli*

L18 ANSWER 56 OF 64 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
TI Expression of Arabidopsis CAX1 in tobacco: Altered calcium homeostasis
and increased stress sensitivity

L18 ANSWER 57 OF 64 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
TI Expression of nhaAv gene encoding Na^{sup.}/H^{sup.} **antiporter**
from *Vibrio alginolyticus* in a freshwater cyanobacterium *Synechococcus*
sp. PCC 7942 confers lithium tolerance, but not sodium tolerance

L18 ANSWER 58 OF 64 USPATFULL on STN
TI Methods for generating and screening novel metabolic pathways

L18 ANSWER 59 OF 64 USPATFULL on STN
TI Methods for generating and screening novel metabolic pathways

L18 ANSWER 60 OF 64 USPATFULL on STN
TI Metabolic monitoring of cells in a microplate reader

=> d 118 52,57 bib

L18 ANSWER 52 OF 64 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:499955 CAPLUS
DN 136:163923
TI Salt tolerance of a freshwater cyanobacterium *Synechococcus* sp. PCC 7943 transformed with Na⁺/H⁺ **antiporter** from *Vibrio alginolyticus*
AU Kaku, Nobuo; Hibino, Takashi; Tanaka, Yoshito; Ishikawa, Hiroshi; Nakamura, Tatsunosuke; Takabe, Teruhiro
CS Res. Inst., Meijo Univ., Japan
SO Meijo Daigaku Sogo Kenkyusho Kiyo (2000), 5, 105-113
CODEN: MDSKF8
PB Meijo Daigaku Sogo Kenkyusho
DT Journal
LA Japanese

L18 ANSWER 57 OF 64 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
AN 1999:29273303 BIOTECHNO
TI Expression of nhaAv gene encoding Na^{sup.}+/H^{sup.}+ **antiporter** from *Vibrio alginolyticus* in a freshwater cyanobacterium *Synechococcus* sp. PCC 7942 confers lithium tolerance, but not sodium tolerance
AU Kaku N.; Hibino T.; Tanaka Y.; Takabe T.; Nakamura T.; Takabe T.
CS T. Takabe, Res. Institute of Meijo University, Department of Chemistry, Faculty of Science and Technology, Tenpaku-ku, Nagoya, Aichi 468-8502, Japan.
SO Plant and Cell Physiology, (1999), 40/5 (557-564), 25 reference(s)
CODEN: PCPHA5 ISSN: 0032-0781
DT Journal; Article
CY Japan
LA English
SL English

=> d 118 61-64 ti

L18 ANSWER 61 OF 64 USPATFULL on STN
TI Methods and therapeutic compositions for treating cystic fibrosis

L18 ANSWER 62 OF 64 USPATFULL on STN
TI Sodium ion binding proteins

L18 ANSWER 63 OF 64 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
TI Salt tolerance in plants and microorganisms: Toxicity targets and defense responses

L18 ANSWER 64 OF 64 USPATFULL on STN
TI Sodium ion binding proteins

=> d 118 63

L18 ANSWER 63 OF 64 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V. on STN
AN 1996:26118463 BIOTECHNO
TI Salt tolerance in plants and microorganisms: Toxicity targets and defense responses

AU Serrano R.
CS Instituto de Biologia Molecular, Celular de Plantas, Univ Politecnica,
CSIC,46022 Valencia, Spain.
SO International Review of Cytology, (1996), 165/- (1-52)
CODEN: IRCYAJ ISSN: 0074-7696
DT Journal; General Review
CY United States
LA English
SL English

=> d his

(FILE 'HOME' ENTERED AT 14:08:10 ON 20 OCT 2003)

FILE 'MEDLINE, AGRICOLA, CABA, CAPLUS, BIOSIS, BIOTECHNO, USPATFULL'
ENTERED AT 14:08:27 ON 20 OCT 2003

L1 75 S (GAXIOLA, R? OR GAXIOLA R?)/AU
L2 3459 S (FINK, G? OR FINK G?)/AU
L3 682 S (ALPER, S? OR ALPER S?)/AU
L4 14 S L1 AND L2 AND L3
L5 4 DUPLICATE REMOVE L4 (10 DUPLICATES REMOVED)
L6 4165 S L1 OR L2 OR L3
L7 4151 S L6 NOT L4
L8 165 S L7 AND PLANT
L9 95 S VACUOLAR(W) PYROPHOSPHATASE
L10 10498 S ANTIPORTER
L11 10584 S L9 OR L10
L12 10 S L8 AND L11
L13 5 DUPLICATE REMOVE L12 (5 DUPLICATES REMOVED)
L14 10549 S L11 NOT L6
L15 540 S L14 AND PLANT
L16 65977 S (PLANT(S)TRANSFORM?) OR (PLANT(S)TRANSGENIC) OR (PLANT(S)RECO
L17 71 S L15 AND L16
L18 64 DUPLICATE REMOVE L17 (7 DUPLICATES REMOVED)

=> s l9 and l10 and plant

L19 9 L9 AND L10 AND PLANT

=> duplicate remove l19

DUPLICATE PREFERENCE IS 'MEDLINE, CABA, CAPLUS, BIOSIS, BIOTECHNO, USPATFULL'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L19

L20 5 DUPLICATE REMOVE L19 (4 DUPLICATES REMOVED)

=> d l20 1-5 ti

L20 ANSWER 1 OF 5 USPATFULL on STN

TI Proton transporters and uses in plants

L20 ANSWER 2 OF 5 USPATFULL on STN

TI Methods for imparting desirable phenotypic traits, including drought,
freeze, and high salt tolerance and methods for increasing seed
production

L20 ANSWER 3 OF 5 MEDLINE on STN

TI Increased vacuolar Na(+)/H(+) exchange activity in Salicornia bigelovii
Torr. in response to NaCl.

L20 ANSWER 4 OF 5 MEDLINE on STN

TI Vacuolar proton pyrophosphatase activity and pyrophosphate (P_{Pi}) in
Toxoplasma gondii as possible chemotherapeutic targets.

L20 ANSWER 5 OF 5 MEDLINE on STN

TI Characterization of a **vacuolar pyrophosphatase** in

Trypanosoma brucei and its localization to acidocalcisomes.

=> d 120 1-3 bib

L20 ANSWER 1 OF 5 USPATFULL on STN
AN 2002:315970 USPATFULL
TI Proton transporters and uses in plants
IN Gaxiola, Roberto A., Mansfield Center, CT, UNITED STATES
Fink, Gerald R., Chestnut Hill, MA, UNITED STATES
Alper, Seth L., Boston, MA, UNITED STATES
PA Whitehead Institute for Biomedical Research, Cambridge, MA, UNITED STATES, 02142 (U.S. corporation)
PI US 2002178464 A1 20021128
AI US 2001-834998 A1 20010413 (9)
RLI Continuation of Ser. No. US 2000-644039, filed on 22 Aug 2000, ABANDONED
PRAI US 1999-164808P 19991110 (60)
DT Utility
FS APPLICATION
LREP HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133
CLMN Number of Claims: 76
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 1543
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20 ANSWER 2 OF 5 USPATFULL on STN
AN 2002:38560 USPATFULL
TI Methods for imparting desirable phenotypic traits, including drought, freeze, and high salt tolerance and methods for increasing seed production
IN Gaxiola, Roberto A., Mansfield Center, CT, UNITED STATES
PI US 2002023282 A1 20020221
AI US 2001-934088 A1 20010820 (9)
PRAI US 2000-226223P 20000818 (60)
DT Utility
FS APPLICATION
LREP Cummings & Lockwood, Granite Square, 700 State Street, P.O. Box 1960, New Haven, CT, 06509-1960
CLMN Number of Claims: 32
ECL Exemplary Claim: 1
DRWN 14 Drawing Page(s)
LN.CNT 1030
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20 ANSWER 3 OF 5 MEDLINE on STN
AN 2002234248 MEDLINE
DN 21968668 PubMed ID: 11971917
TI Increased vacuolar Na(+)/H(+) exchange activity in Salicornia bigelovii Torr. in response to NaCl.
AU Parks Graham E; Dietrich Margaret A; Schumaker Karen S
CS University of Arizona, Department of Plant Sciences, Tucson, AZ 85721, USA.
SO JOURNAL OF EXPERIMENTAL BOTANY, (2002 May) 53 (371) 1055-65.
Journal code: 9882906. ISSN: 0022-0957.
CY England: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200207
ED Entered STN: 20020425
Last Updated on STN: 20020723
Entered Medline: 20020722

=> d his

(FILE 'HOME' ENTERED AT 14:08:10 ON 20 OCT 2003)

FILE 'MEDLINE, AGRICOLA, CABA, CAPLUS, BIOSIS, BIOTECHNO, USPATFULL'
ENTERED AT 14:08:27 ON 20 OCT 2003

L1 75 S (GAXIOLA, R? OR GAXIOLA R?)/AU
L2 3459 S (FINK, G? OR FINK G?)/AU
L3 682 S (ALPER, S? OR ALPER S?)/AU
L4 14 S L1 AND L2 AND L3
L5 4 DUPLICATE REMOVE L4 (10 DUPLICATES REMOVED)
L6 4165 S L1 OR L2 OR L3
L7 4151 S L6 NOT L4
L8 165 S L7 AND PLANT
L9 95 S VACUOLAR(W)PYROPHOSPHATASE
L10 10498 S ANTIporter
L11 10584 S L9 OR L10
L12 10 S L8 AND L11
L13 5 DUPLICATE REMOVE L12 (5 DUPLICATES REMOVED)
L14 10549 S L11 NOT L6
L15 540 S L14 AND PLANT
L16 65977 S (PLANT(S)TRANSFORM?) OR (PLANT(S)TRANSGENIC) OR (PLANT(S)RECO
L17 71 S L15 AND L16
L18 64 DUPLICATE REMOVE L17 (7 DUPLICATES REMOVED)
L19 9 S L9 AND L10 AND PLANT
L20 5 DUPLICATE REMOVE L19 (4 DUPLICATES REMOVED)

=> logoff

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

80.65

80.86

STN INTERNATIONAL LOGOFF AT 14:19:49 ON 20 OCT 2003